

Building 820M P.O. Box 5000 Upton, NY 11973-5000 Phone 631 344-7830 Fax 631 344-3115 yakimenko@bnl.gov

managed by Brookhaven Science Associates for the U.S. Department of Energy

June 22, 2010

Dear Colleague,

This is a call for proposals and an invitation to participate in the next Accelerator Test Facility (ATF) Users' Meeting at Brookhaven National Laboratory on October 6-7, 2010

The ATF is a users' facility for accelerator and beam physicists. Its users come from the USA and abroad, from universities, industry and national laboratories. The ATF has proven to be an excellent place to train students in the physics of beams. Experiments at the ATF cover a variety of subjects, such as laser acceleration, generation of coherent radiation, and advanced accelerator instrumentation. The use of the ATF electron beam, lasers and diagnostic tools is free of charge for users. The ATF staff is committed to providing expertise and assistance in the design and implementation of user experiments. Proposals to carry out experiments are evaluated in a peer review process by the ATF Program Advisory Committee. The ATF Program Advisory Committee (APAC) will meet during the Users' Meeting.

The ATF experimental program is carried out on three high-energy beam lines at up to 85 MeV in a well equipped experiment hall. The beam typically has an emittance of one to two mm-rad (rms, normalized) at a charge of about half a nC. The electron bunch length is adjustable from 10 ps down to about a quarter of a ps. The beam macropulse repetition rate is between 1 and 3 pps. The charge is continuously variable up to about a nC. Besides the electron beam the ATF provides high power laser beams synchronized to the electron beam to a picosecond. The laser beams consist of a Nd:YAG laser at about 20 mJ over 15 ps and a CO2 laser at about 5 Joule over 5 ps.

We invite you to join us at the ATF Users' Meeting and learn about the research opportunities. If you have an experiment that you would like to run at the ATF we encourage you to submit a proposal to Dr. Robert Palmer by September 15<sup>th</sup> (c/o Kathleen Tuohy (tuohy@bnl.gov).

You are welcome to contact me by phone at (631)344-7830 or by email at <a href="mailto:yakimenk@bnl.gov">yakimenk@bnl.gov</a> for technical details concerning the ATF capabilities. Comprehensive information is available on the web at <a href="http://www.bnl.gov/atf/Menu.html">http://www.bnl.gov/atf/Menu.html</a>, including descriptions of past and present experiments.

Unfortunately, the BNL Guest House is fully booked, but a few small apartments have been reserved. If you would like a reservation, please contact Kathleen Tuohy as soon as possible. Information, including details on how to register will follow. Please pass this information on to others who may be interested.

Sincerely yours,

Vitaly Yakimenko, Director, BNL ATF.